Facility Information

Name: Laclede Water District

Contact: Doug Carothers, Superintendent/Operator

Type: Water Supply (SIC 4941)

Physical Address: 486 Riley Creek Park Drive, Laclede, ID 83841

Mailing Address: P.O. Box 222, Laclede, ID 83841

Phone Number: (208) 255-4068 Fax Number: same as phone Permit Number: ID-002794-4

Inspection Information

Date: July 27, 2011 Entry Time: 9:00 am Exit Time: 10:15 am

Inspector(s): Jennifer Wester (Idaho DEQ-State Office), Matt Plaisted (Idaho DEQ-CRO)

Facility Personnel: Doug Carothers (Laclede Water District) Report Author: Jennifer Wester (Idaho DEQ-State Office)

Inspection Type: Announced CEI Weather: Mostly sunny, around 75°F

Purpose: Determination of compliance with NPDES Permit #ID-002794-4 and the Clean Water Act.

Owner/Operator Information

Owner: Laclede Water District Operator: Doug Carothers

Inspection Entry

Mr. Plaisted and I arrived at the facility at 9:00 am to meet Mr. Carothers at the plant. No credentials were presented as I have not yet received any; however I showed my DEQ identification badge and left a copy of my business card. I explained that DEQ has a contract with EPA to perform a number of NPDES inspections each year. Access was granted to inspect and photograph the wastewater treatment system and operation records.

Background

The Laclede Water District's water treatment plant consists of two parallel filter beds. The facility is located south of Highway 2 on Riley Creek Park Road. The plant is fenced and consists of the main filter building which houses the filters, pumps, treatment and metering. The District offices are connected to the filter building on the west side and are scheduled for expansion within the next few years, depending on funding. The settling pond for the backwash and filter-to-waste is located approximately 50 feet east of the plant. The discharge from the pond flows into an unnamed drainage ditch along Riley Creek Park Road that also receives discharge from the lumber yard north of the plant. The ditch

eventually discharges into the Pend Oreille River, which is the receiving water for Outfall 001. There are no other outfalls from the plant.

Waste Management Process

Wastewater from the treatment process is generated from periodic backwash of the filters and contributions from filter-to-waste. The backwash dislodges particles that clog the filters, extending the filter's operational life. Filter-to-waste is generated immediately following a backwash when the filtered water is not considered to be of drinking water quality. At the Laclede plant, these wastewaters are sent to a retention pond (see Figures 11 through 16 in Appendix 1) where the flocculated solids are allowed to settle before passing through the screened discharge structure to the outfall.

Scope of the Inspection

During the inspection, I reviewed the facility permit, records (see Figures 1 through 5 of Appendix 1), treatment site (see Figures 6 through 11 in Appendix 1), operations and maintenance and discharge point (see Figure 19). Sample collection was not evaluated at the time of the inspection. While flow meter calibration was discussed, no calibration records were examined. Sludge handling processes and procedures were not evaluated at the time of the inspection.

Records Review

As shown in Figures 1 through 5 of Appendix 1, I reviewed the most recent Discharge Monitoring Report (DMR) (June 2011) and associated documentation as well as material to be used in the compilation of the July 2011 DMR. Hard copies of DMR data submitted by the permittee are kept in the office at the plant. Figures 3 and 4 show the TSS laboratory data sheets for July and June 2011, respectively. The calculations for the June 2011 DMR were done correctly and there were no discrepancies noted between the recorded and reported data.

The permittee did not have a Quality Assurance Plan (QAP) onsite at the time of the inspection. Various aspects of the QAP, including some sampling procedures, were found in the operation and maintenance (O&M) manual.

The O&M manual for the permittee is dated September 2002. The O&M contains operating procedures and manuals for current treatment system equipment, as well as some aspects of the QAP as discussed above. I suggested that the O&M manual be evaluated and updated as necessary with the new permit. I also suggested that the permittee compile a separate QAP that included, at minimum, the items required by the permit.

Receiving Water

The Laclede water treatment plant discharges to an unnamed ditch which is tributary to the Pend Oreille River. Figures 18 and 19 show Outfall 001 after the settling pond. I did not follow the ditch all the way to the river since significant contributions are added periodically from the lumber yard north of the plant before the plant discharge reaches the Pend Oreille River according to the operator.

NPDES Inspection Report

Area(s) of Concern

Permit Section II.A.3: At the time of the inspection, the QAP was missing. Some required elements of the QAP were found in the O&M manual. I communicated to Mr. Carothers that a separate QAP is required during review of the plant records.

At the time of the inspection, a second PVC pipe of approximately 3-inch diameter was found to be discharging into the ditch south of the settling pond and west of Outfall 001 (see Figure 17). The outlet of the unknown pipe was found on the south side of the settling pond berm and the pipe appeared to run north toward the settling pond, although the operator was not sure where the pipe comes from.

Other Observations

During permit review, I noticed that Note 6 in Table 1 of Section I.B.1 of the permit requires the permittee to sample for metals and total trihalomethanes (TTHMs) "during the first three years of permit only." The permittee has continued to monitor for these parameters. From email correspondence with David Domingo in EPA's Seattle office on July 25, 2011 regarding a similar situation for another permittee, the permittee is no longer required to monitor surface water. At the time of the inspection, I promised the permittee that I would check with EPA regarding the issue. I did not authorize them to discontinue monitoring, stating that such authorization would come directly from EPA.

Closing Conference

The closing conference took place after observing the outfall with Doug Carothers (Laclede), Matthew Plaisted (DEQ-CRO), and myself (Jennifer Wester, DEQ-Technical Services). I reviewed the recommendations to update the O&M Manual and compile the QAP. Mr. Plaisted and I exited the facility at 10:15 am.

Appendices

- 1. Photo Log
- 2. Permit Status Report dated July 27, 2011

ennifu Wester

Signature and Date

Jennifer Wester, P.E.

Idaho DEQ

8/25/2011

TRIM Record: 2011AGF2263